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# PATENT SPECIFICATION (11)

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TEVES A KG 15.03.72-DT-212464

Q63\* (18.02.76) F16d-55/02

Two brake pad carriers (2, 2<sub>1</sub>) with associated pads (3, 3<sub>1</sub>)

are pressed down by a device (4) which consists of two

(71) TEVE

Disc brake caliper housing - has pivotal spring strip device holding and

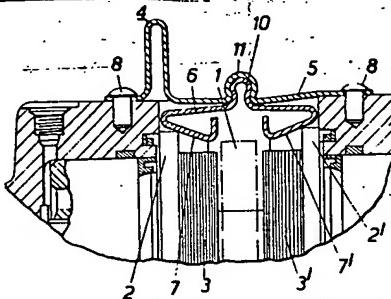
urging apart pad carriers

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Q63\* (18.02.76) F16d-55/02

Two brake pad carriers (2, 2<sub>1</sub>) with associated pads (3, 3<sub>1</sub>)

are pressed down by a device (4) which consists of two



with force components holding the carriers and urging the pads away from the brake disc. Spring (6) has a central loop (10) held in a loop (11) of the upper spring (5) so that the spring (6) is pivotal to accommodate different pad carrier heights. 9.3.73. as 011406 Add to 1278747 (3pp).

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springs which form the spring

device may result in different contact pressure

of the sloping surfaces which engage upon the

parts of the braking elements, in particular the

brake pad carriers. This is particularly the

result of manufacturing inaccuracies of the

spring device as well as of the brake pad carriers.

It is an object of the present invention to

modify this earlier arrangement to try to ensure

equal retention forces on the braking elements

in the caliper housing.

According to the present invention a disc

brake caliper housing is adapted to contain

pad carriers and has a spring device arranged

to bear against respective parts of such carriers

in such manner as to retain them otherwise

than by friction in the housing and at the

same time urge them in a direction away from

each other, said device in use straddling a brake

disc and having a part pivotally mounted so as

to assist in accommodating differences in the

dimensions of the pad carriers caused by manu-

facturing tolerances.



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Fig 6 are bent in-  
dent again towards the

upper spring 5 leaving a safety gap so that the

device has a limit to its springiness. With the

thus resulting sloping surfaces 7 and 7' the

spring 6 rests on the upper (as viewed here)

inner edges of the pad carrier plates 2 and 2'.

The upper strip spring 5 engages with its ends

underneath the heads of two ribbed nails 8,

which are arranged opposite to each other on

both sides of the pad shaft so that the support

4 can support itself stationary on caliper

housing 9 of the disk brake. This spring arrange-

ment gives rise to forces having a radially

directed retaining component (holding the pads

+ carriers in the shaft) and an axially directed

separating component (urging the pads away

from the brake disk).

The lower flat spring has in its middle part

an eye-like portion or loop 10, directed up-

wards, which is held in a corresponding loop 11

of the upper spring 5, the loop 10 and the loop

11 may be bent for more than 180°, so that the

loop 10 in the lower spring can be pushed into

the loop 11 of the upper spring 5 only laterally

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and thus it is taken along with the flat spring 5, resting on top, when it is lifted vertically from the disk brake.

By means of this design the lower spring 6 is pivoted around an axis perpendicular to its longitudinal extension. Thus it is possible that different heights of the pad carriers attributable to manufacturing tolerances, can be accommodated by the spring device.

10 WHAT WE CLAIM IS:-

1. A disc brake caliper housing adapted to contain pad carriers and having a spring device arranged to bear against respective parts of such carriers in such manner as to retain them otherwise than by friction in the housing and at the same time urge them in a direction away from each other, said device, in use, straddling a brake disc and having a part pivotally mounted so as to assist in accommodating differences in the dimensions of the pad carriers caused by

manufacturing tolerances.

2. A housing as claimed in claim 1, the device comprising two spring strips, having mating loops, one loop being held within the other loop, the axis of the pivot being perpendicular to the longitudinal edges of the spring strips and one strip being secured to the housing, the other strip forming said part.

3. A housing as claimed in claim 2, wherein the spring strip arranged to bear on the pad carrier has the smaller loop, both loops being disposed on that side of the spring strips remote from the brake disc.

4. A disc brake caliper housing in combination with a spring device substantially as hereinbefore described with reference to the accompanying drawing.

P.G. RUFFHEAD  
CHARTERED PATENT AGENT  
FOR THE APPLICANTS.

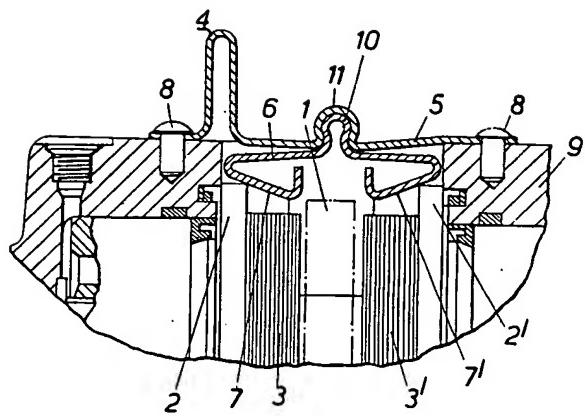
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COMPLETE SPECIFICATION

1 SHEET

*This drawing is a reproduction of  
the Original on a reduced scale*



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